



Production Readiness Review

TO 149 – Form 2000 Enhancements

March 11, 2004



- Overview
- Benefits
- Project Timeline
- Project Approach
- Testing
- Collaboration
- Issues and Risks
- Conclusion



Form 2000 Enhancements Release II

Enhancement updates include the following:

- Monthly/Quarterly Form Reconfiguration
- Monthly/Quarterly Form Reconfiguration Conversion
- Report Modifications and Custom Reports
- FP DataMart Data Transfer Program
- SAIG File Transfer Interface
- Monthly GL Load and Item Number Interface



Monthly/Quarterly Form Reconfiguration

The FFEL GA Form 2000 Monthly and Monthly/Quarterly Forms will be enhanced so that MR-1 to MR-26 reside on the Monthly Form and MR-27 to MR-42 reside on the Monthly/Quarterly Form.

- **Form 2000 Monthly Form**

- Fields MR-24, MR-25, MR-26 (Item Number, Category Detail, Principal Amount, Interest Amount, and Other Amount columns) will be added to this form (along with the Agency Accrual Subheading).
- Existing code will be modified to reference the monthly table when MR-24, MR-25, MR-26 exist as part of a calculation (i.e. edits).

- **Form 2000 Monthly/Quarterly Form**

- Fields MR-24, MR-25, MR-26 (Item Number, Category Detail, Principal Amount, Interest Amount, and Other Amount columns) will be removed from this form.



Monthly/Quarterly Form Reconfiguration Conversion

All historical data for fields MR-24, MR-25, MR-26 in the Monthly/Quarterly Form will be converted to the Monthly Form.

- **Form 2000 Monthly Table (ffelga_monthly_reports)**

- Table will be altered to include necessary data columns for MR-24, MR-25, MR-26 fields.
- SFA Account Mapping will be updated so that fields MR-24, MR-25, MR-26 are mapped to subsystem “Monthly”, rather than “Monthly/Quarterly”.
- Existing SQL scripts and view definitions will be updated to pull MR-24, MR-25, MR-26 from the Monthly table, rather than the Monthly/Quarterly table.

- **Form 2000 Monthly/Quarterly Table (ffelga_monquart_reports)**

- A PL/SQL custom program will be created to extract historical data for MR-24, MR-25, MR-26 from the Monthly/Quarterly table and update Monthly records based on GA code, fiscal year, and month.
- All converted data will remain in the Monthly/Quarterly table so that queries referencing historical data in this table will continue to execute properly.



Report Modifications and Custom Reports

As a result of the Monthly/Quarterly Form Reconfiguration, existing FSA Form 2000 custom reports will be modified so that MR-24, MR-25, MR-26 are referenced correctly. In addition, a custom summary level reconciliation report will be created.

The following reports will be modified to display fields MR-24, MR-25, MR-26:

- **SFA FFEL GA Form 2000 Monthly Composite Detail Report**
- **SFA FFEL GA Form 2000 Monthly Detail Report**

The following reports will be modified to pull fields MR-24, MR-25, MR-26 from the Monthly table, rather than the Monthly/Quarterly table:

- **FSA FMS FYTD Calculated Federal Receivable Balance Report**
- **FSA FMS Monthly Calculated Federal Receivable Balance Report**
- **FSA FMS Quarterly Calculated Federal Receivable Balance Report**

The following custom report will be developed:

- **FSA FMS Summary Reconciliation Report**



FP DataMart Data Transfer Program

As a result of the Monthly/Quarterly Form Reconfiguration, components of the FSA FP DataMart Data Transfer Program will be modified.

- **Database Tables**

- The FP DataMart Form 2000 Monthly source and production tables referenced within the FSA FP DataMart Data Transfer Program, SR_FFELGA_MONTHLY_REPORTS and SR_FFELGA_MONTHLY_REPORTS_PRV, will be altered to include fields MR-24, MR-25, MR-26.

- **Informatica Sessions**

- Two Informatica session mappings, m_Load_F_FM2000_MNTH and m_Load_to_PRV, will be modified in the FP DataMart system to account for the addition of MR-24, MR-25, MR-26 to the Monthly report tables.

***Note: None of the FP DataMart Microstrategy Reports will be affected by these changes. However, the DataMart Operations Team will communicate the table changes to the PowerUsers, who run custom queries which may reference these fields.*



SAIG File Transfer Interface

The FMS Form 2000 SAIG Date File Load process will be enhanced to allow GAs the ability to submit their Form 2000 Monthly, Monthly/Quarterly and Annual Reports via SAIG File Load, thus eliminating the usage of VPN as a file transfer mechanism. The enhancements will include:

- **Hard Edit Validation**

- The interface will include a procedure that will run the Hard Edits against the Monthly and Monthly/Quarterly reports and automatically notify the GA if any of the edits fail.

- **Valid Report Submission**

- The interface will also include a procedure that will transfer report data to the Form 2000 base tables with a status of 'Submitted' for all Annual Reports and Monthly and Monthly/Quarterly Reports that pass Hard Edit validation.

- **Email Notification**

- Three new email notifications will be created in Oracle Alerts and will be sent after a Monthly, Monthly/Quarterly or Annual Report data file is processed. The email will state whether the data in the report passed or failed the Hard Edits. If the report fails the edits, a descriptive error message will be provided.



Monthly GL Load and Item Number Interface

A new interface will be created to modify the trigger which generates Form 2000 Monthly GL entries, in addition to updating the GL journal lines with the item numbers associated with the Form 2000 AP transactions.

- **Monthly GL Interface Trigger Modification**

- The AP/GL Interface will be modified to exclude logic which currently loads Monthly report data into the FMS GL upon execution (FP acceptance).
- A new custom interface program will be developed to create GL entries for the Form 2000 Monthly report after the associated invoice is approved.
- A business process change will be implemented so that Budget Services notifies FMS Operations and FP's of Splitter Allocation changes and modifications are made with coordination between all parties.

- **AP/GL Interface Item Number Modification**

- A separate procedure will be created within the new Monthly GL Interface to update the Monthly report AP transaction lines in the FMS GL with the associated report item numbers.



Form 2000 Enhancements Release II

Benefits:

- **Efficient & Cleaner Audit** - Transferring fields MR-24, MR-25, MR-26 from the Monthly/Quarterly Report to the Monthly Report will result in all accounting fields residing on the Monthly Report and all non-accounting fields residing on the Monthly/Quarterly Report.
- **Timely & Accurate Reconciliation** – The Monthly GL Load and Item Number Interface will ensure that all AP transactions post to the same GL period and have an item number associated with that entry. In addition, the Summary Reconciliation Report will replace the manual report currently used to reconcile Federal Fund and Restricted Account Balance data.
- **Consistent & Streamlined Procedures** – The SAIG File Transfer Interface will allow GAs the ability to submit their Form 2000 Report files the same way that they do for other FSA programs, thus providing consistency between programs and encouraging more GAs to submit Form 2000 reports via file transfer. In addition, the streamlined process will verify Form 2000 reports based on existing hard edits and automatically submit the report for FP approval.
- **Security** – The SAIG system encrypts files providing greater security than the current VPN method.



Key Project Dates

- 10/6 – 10/17: Requirements Matrix & Work Plan Creation
- 10/20 – 11/14: Functional Design
- ***November 21: Functional Design & Work Plan Deliverable Due***
- 11/17 – 12/17: Technical Design
- 12/18 – 1/23: Build & Unit Test
- 11/24 – 1/23: Scenario Identification & Script Development
- 1/22 – Test Readiness Review
- ***January 30: Test Scenarios & Test Script Deliverable Due***
- 1/26 – 2/13: System Test
- 2/16 – 2/27: Integration Test
- 3/1 – 3/5: User Acceptance Test
- 3/10: Pre-Production Readiness Review
- 3/11: Production Readiness Review
- ***March 12: Production Readiness Review Deliverable Due***
- 4/4: Go Live
- ***April 9: Production Migration Validation Deliverable Due***

Complete



Summary of Approach

Planning: Planning involved defining the scope of the task order and developing a workplan with scheduled completion dates.

Requirements and Design: Requirements gathering involved working with FSA representatives to document the functionality required; including the creation of a detailed requirements matrix and meeting memos to document all communication. These documents served as reference for the design effort and the creation of functional and technical design documents.

Development: Development involved following the specifications captured during the design stage to build the required Forms 2000 enhancements.

Testing: Unit, system, integration, and user acceptance testing were performed to ensure that the changes made provided the appropriate functionality as specified in the design stage. User acceptance testing included user validation and “free play” in the testing instance. In addition, regression testing was performed on existing Form 2000 reports to ensure they were not affected by the enhancements.

Implementation and Deployment: This stage of work involves deploying the functionality and technology required to establish the Form 2000 Enhancements components in a manner consistent with the functional and technical requirements. All documents and deliverables are accessible on the shared drive. (F:\TO 149 – Form 2000 Enhancements II)



Testing Summary

Unit Testing: This phase of testing was conducted by the development team to ensure that the logic programmed for the individual components met the functional requirements specified in the design documents. This testing was completed in the development environment (FRM2K).

System Testing: This phase of testing was conducted by the testing team to ensure that the individual components function properly when integrated. Test scripts and data sets were developed and used to validate requirements. The testing was completed in a separate testing environment (TSTING). Accounting Validation was done by the testing team.

Integration Testing: This phase of testing was a thorough end to end test of the systems integrated. It ensured that the systems functioned properly when integrated. Test scripts and data sets were developed and used to validate requirements. This testing effort was coordinated with SAIG, EAI, FP Data Mart, LPIF, FMSS and was executed in TSTING.

User Acceptance Testing: This phase of testing involved the FSA and Guaranty Agency Representatives. Test scripts and data sets were developed and used to validate requirements. The users provided feedback, validated the results, and signed off on the test scripts. This testing was also executed in TSTING.



Testing Summary – System

- During System Testing issues were logged and resolved prior to beginning Integration Testing.

Summary of Test Incidents logged during system testing:

Test Phase	Open	Closed	Total
System	0	4	4

- Conclusion:** All Form 2000 Enhancements System Test Scripts were successfully executed.

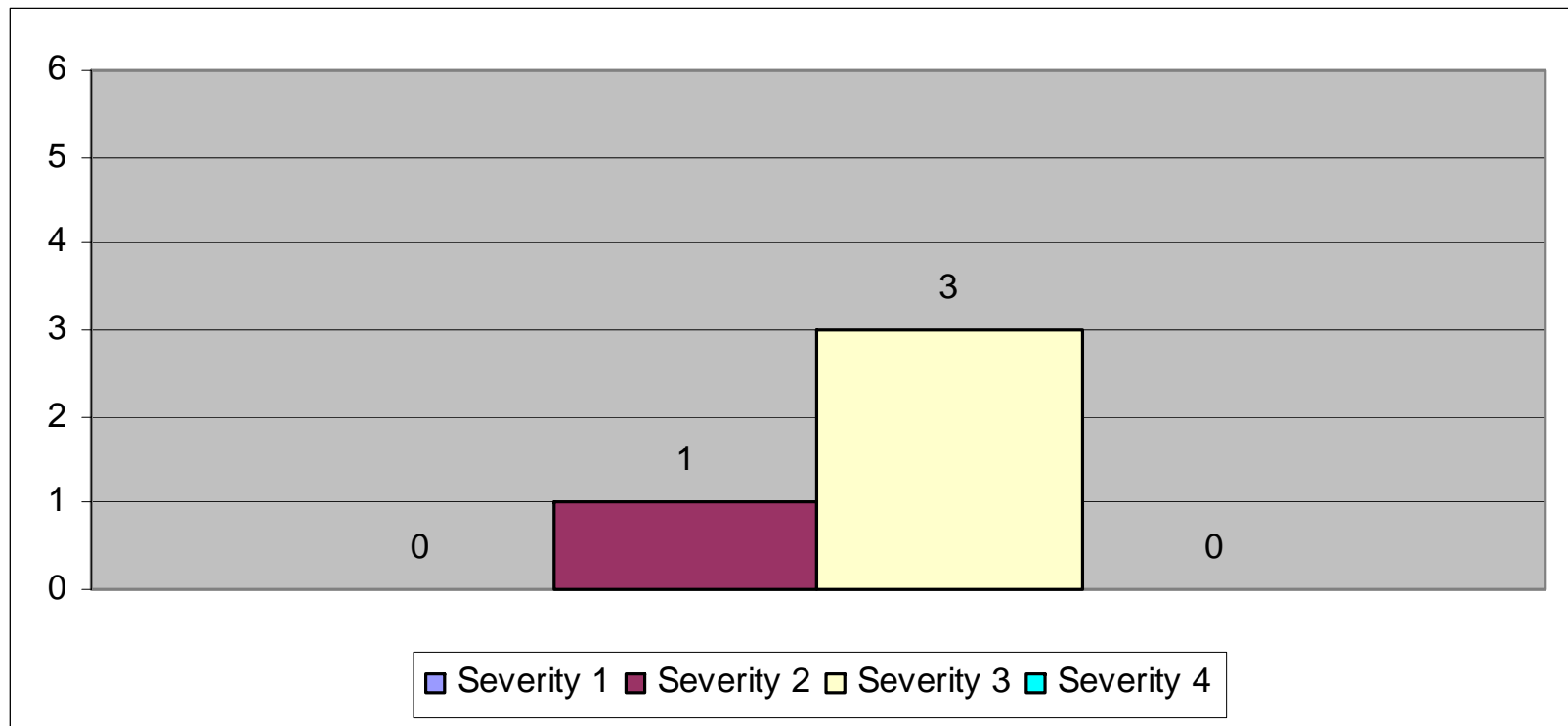
Closed: Error has been resolved and retested

Open: Error has not been resolved



Testing Summary – System (Continued)

Form 2000 Enhancements System Test Incidents by Severity



Severity 1: Major Problem. System doesn't respond or crashes

Severity 2: Major feature halts. Incorrect results after execution

Severity 3: Expectations of major feature not met. Workaround possible

Severity 4: Feature executes correctly, but minor cosmetic changes needed



Testing Summary – Integration

- During Integration Testing issues were logged and resolved prior to beginning User Acceptance Testing.

Summary of Test Incidents logged during Integration Testing:

Test Phase	Open	Closed	Total
Integration	0	1	1

- **Conclusion:** All Form 2000 Enhancements Integration Test Scripts were successfully executed.

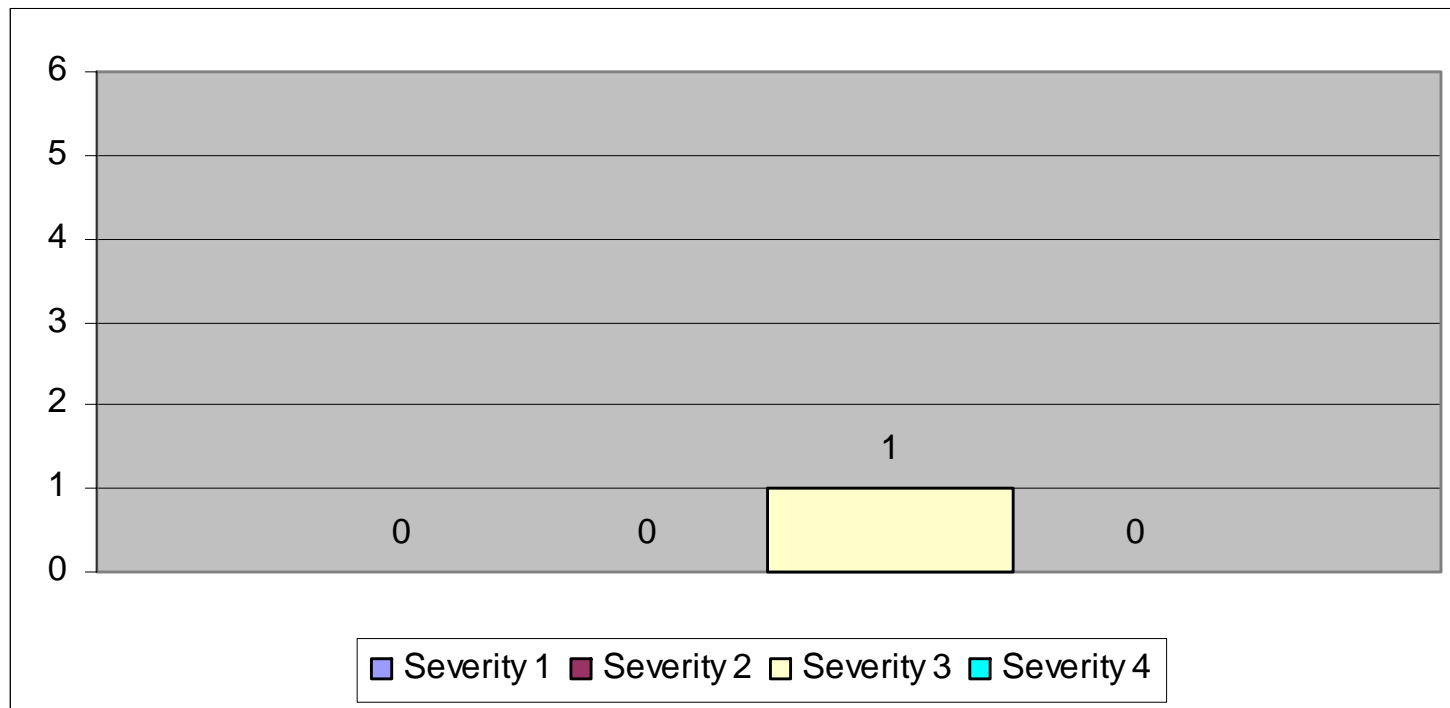
Closed: Error has been resolved and retested

Open: Error has not been resolved



Testing Summary – Integration (Continued)

Form 2000 Enhancements Integration Test Incidents by Severity



Severity 1: Major Problem. System doesn't respond or crashes

Severity 2: Major feature halts. Incorrect results after execution

Severity 3: Expectations of major feature not met. Workaround possible

Severity 4: Feature executes correctly, but minor cosmetic changes needed



Testing Summary – User Acceptance Testing

- During UAT all issues were logged and resolved.

Summary of Test Incidents logged during UAT:

Test Phase	Open	Closed	Total
UAT	0	3	3

- **Conclusion:** All Form 2000 Enhancements UAT Scripts were successfully executed.

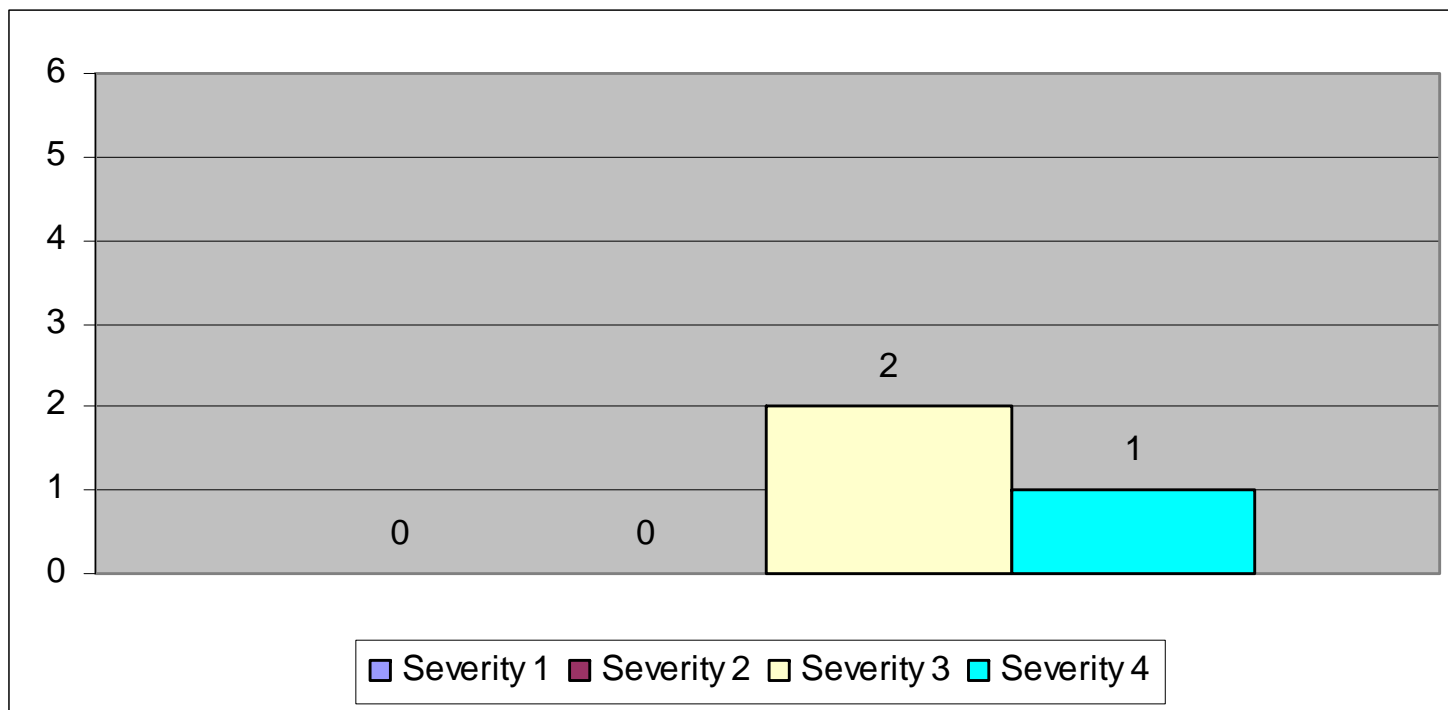
Closed: Error has been resolved and retested

Open: Error has not been resolved



Testing Summary – User Acceptance Testing (Continued)

Form 2000 Enhancements UAT Incidents by Severity



Severity 1: Major Problem. System doesn't respond or crashes

Severity 2: Major feature halts. Incorrect results after execution

Severity 3: Expectations of major feature not met. Workaround possible

Severity 4: Feature executes correctly, but minor cosmetic changes needed



Testing Summary – Incidents

- **Current Open System Test SIRs:**
There are no open System Test incidents.
- **Current Open Integration Test SIRs:**
There are no open Integration Test incidents.
- **Current Open User Acceptance Test SIRs:**
There are no open UAT incidents.

* Details about Incidents that were recorded and resolved can be found in the System, Integration and UAT test binders.



VDC/Operational Readiness

- ORR not necessary, per VDC

Security Impact

- No changes were made to the existing FSA FMS security structure in terms of technical architecture
- The Summary Reconciliation Report can be run only from the responsibilities where it is registered and not from any other responsibility. This was verified during System Testing
- VPN accounts used by GAs that send files currently will be disabled after successful SAIG submission



FMS Operations Readiness

- Form 2000 - FMS Operations Team Transition Meeting held 12/3/03
- Implementation Transition Documentation will be provided to the FMS Operations team by 3/26 and a follow up meeting will be held before go-live to ensure proper hand off between teams

Trading Partner Readiness

- Confirmation has been received from the following partners that they are ready for the April 4th go-live:

Partner	Contact	Component
EAI	Scott Gray	SAIG File Transfer Interface
SAIG	Judy Rohrer	SAIG File Transfer Interface
FP DataMart	Mark Mandrella	FP DataMart Data Transfer Program
FMSS	Margo Crozier	Regression of GL components



Quality Assurance / IV&V

IV&V documentation and process reviews were performed by the external QA / IV&V team. The QA / IV&V team operates independently of the Integration Partner program and met regularly with the FMS TO 149 team to:

- Perform reviews and traceability analysis of project documentation, application development, requirements, and test cases
- Monitor test progress and SIR closure
- Identify and communicate potential PRR risks/issues



Identified Issues and Risks

- All identified Issues and Risks have been addressed and resolved, as indicated in the Form 2000 Release II Issue Log.xls
- All IV&V Issues have been closed.



Form 2000 Enhancements Release II is ready for Production:

- PRR checklist items are green
- All scheduled tasks to date are completed
- All open issues identified by the independent Quality Assurance/ IV & V Group have been addressed and resolved
- On schedule for April 4, 2004 deployment